

Alternative Hydrocarbon Propulsion for Nano / Micro Launch Vehicle,
Phase II

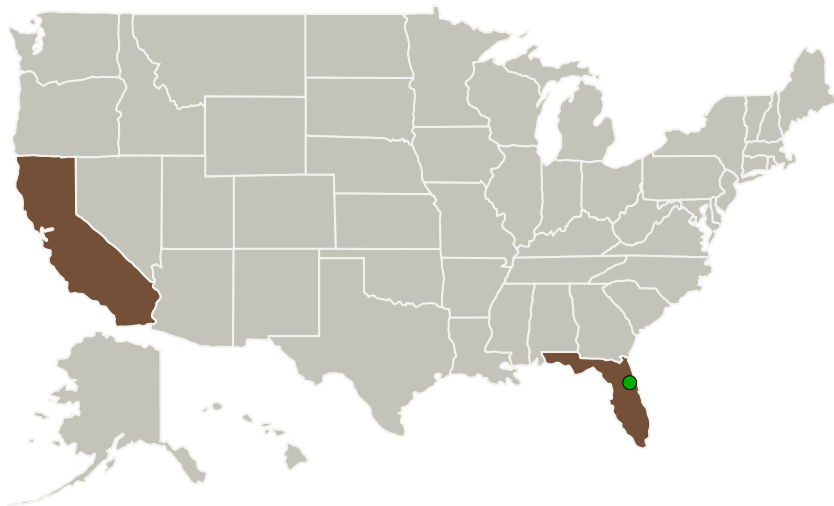
Completed Technology Project (2013 - 2015)



Project Introduction

LOX/propylene

Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
Garvey Spacecraft Corporation	Lead Organization	Industry	Long Beach, California
● Kennedy Space Center(KSC)	Supporting Organization	NASA Center	Kennedy Space Center, Florida

Primary U.S. Work Locations

California	Florida
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Project Transitions


 **August 2013:** Project StartAlternative Hydrocarbon
Propulsion for Nano / Micro
Launch Vehicle, Phase II

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✓ **August 2015:** Closed out

Closeout Documentation:

- Final Summary Chart(<https://techport.nasa.gov/file/137322>)

Images



Briefing Chart

Alternative Hydrocarbon Propulsion
for Nano / Micro Launch Vehicle,
Phase II
(<https://techport.nasa.gov/image/128429>)

Organizational Responsibility

Responsible Mission Directorate:

Space Technology Mission Directorate (STMD)

Lead Organization:

Garvey Spacecraft Corporation

Responsible Program:

Small Business Innovation Research/Small Business Tech Transfer

Project Management

Program Director:

Jason L Kessler

Program Manager:

Carlos Torrez

Principal Investigator:

Christopher M Bostwick

Co-Investigator:

Christopher Bostwick

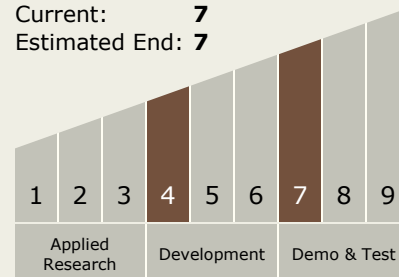
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Technology Maturity (TRL)

Start: 4
Current: 7
Estimated End: 7



Technology Areas

Primary:

- TX01 Propulsion Systems
 - └ TX01.1 Chemical Space Propulsion
 - └ TX01.1.2 Earth Storable

Target Destinations

The Moon, Mars, Outside the Solar System, The Sun, Earth, Others Inside the Solar System